

MISSOURI WATERFOWL STATUS, 2009



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EXECUTIVE SUMMARY

2008-09 Hunting Season: In spite of pre-season concerns about habitat conditions due to late summer floods, dry conditions in southeast Missouri, potentially limited pumping capabilities in the Missouri River floodplain, and poor conditions on the breeding grounds, the 2008-09 season turned out better than expected. Favorable hunting weather, ample water, and a late corn harvest contributed to a near record duck harvest, the highest Canada goose harvest in the last 20 years, and a record snow goose harvest.

2008-09 Duck Harvest: Numbers of hunters participating in the 2008-09 duck season (40,000 vs. the 2001-05 average of 35,900), trips per hunter (8.0 vs. 2001-05 average of 8.2), and average daily success (1.9 vs. 2001-05 average of 1.4) combined to result in a 2008-09 duck harvest of 612,900 (448,400 USFWS estimate), compared to the record harvest of 627,300 (414,200 USFWS estimate) in 2007-08. Only a small portion of the statewide harvest takes place on Department areas. This was especially true during 2008-09, when just 12.7% of the statewide harvest occurred on Department areas.

2008-09 Canada Goose Harvest: As a result of changes to federal frameworks, Missouri was allowed to offer more Canada goose hunting opportunity beginning in 2006, especially during the periods when migrant Canada geese are likely to be present. Now Missouri goose hunters have the opportunity to hunt 62 days in December and January, compared to 40 days under the previous framework. During 2008-09, more individuals (17,000) hunted Canada geese than in 2007-08 (15,200) and they harvested 85,900 Canada geese, a record number (1990-2007).

2008-09 Light Goose Harvest: During 2008-09 regular season and Conservation Order, snow goose hunters harvested a record 222,900 light geese (preliminary estimate). Eight thousand five hundred hunters participated in the 2009 Conservation Order compared to 6,443 in 2008.

2009 Breeding Duck Habitat: Numbers of wetlands termed “May ponds” reflect habitat conditions for breeding ducks. The number of May ponds recorded during spring 2009 totaled 6.8 million, an increase of 45% from the previous year’s estimate of 4.4 million. The estimate of ponds in Prairie Canada was 3.6 million, a 17% increase from the 2008 estimate of 3.1 million. The most significant improvement in wetland conditions occurred in the north-central U.S. In contrast to drought conditions that prevailed during spring 2008, several precipitation events during summer of 2008 and above average snow and precipitation during fall and winter resulted in a 108 % increase in May Ponds from 1.4 during 2008 to 2.9 million during 2009. This is similar to numbers of May ponds recorded in the north-central U.S. during 1999.

2009 Breeding Duck Populations: The total duck population estimate in the traditional survey area increased from 37.3 million during 2008 to 42 million during 2009, an increase of 13%. The 2009 estimate is 25% above the long-term average (1955-2007). Mallard abundance in the traditional survey area (8.5 million) represented a 10% increase from the 2008 estimate of 7.7 million and was 13% above the long-term average. Gadwall (+12%), wigeon (-1%), blue-winged teal (+11%), green-winged teal (+16%) and redheads (-1%) were statistically similar to 2008. Northern pintails increased by 23% from 2008 but remain 20% below their long-term average. Scaup numbers were similar to 2008, but remain 18% below their long-term average. The estimate of 1.0 million redheads was similar to 2008 and 62% above their long-term average.

Canada Goose Status: Canada geese that migrate to Missouri include birds from 4 different populations - Tallgrass Prairie Population, Mississippi Valley Population, Eastern Prairie Population, and the giant Canada goose population. The Tallgrass Prairie Population is now identified by the AOU as a component of the cackling goose species instead of Canada geese. Geese from these different populations experience different breeding conditions each year and survive, reproduce, and are harvested at different

rates. As a result, population-specific information is needed to assess annual status and to develop appropriate regulations recommendations.

Eastern Prairie Population: The Eastern Prairie Population (EPP) of Canada geese is the predominant “subarctic” migrant population represented in the Missouri goose harvest. EPP geese breed primarily in northern Manitoba, along the west coast of Hudson Bay. This region experienced one of the latest springs in the last 40 years. Measures of productivity from the Nestor One study site indicate a likely bust in production. While the overall EPP population estimate of $279,900 \pm 31,200$ was similar to the previous two years, the population consisted of fewer productive geese. Productive geese declined from the record estimate of $89,400 \pm 12,600$ in 2007 to $67,900 \pm 9,800$ in 2008, and then further declined to $54,100 \pm 9,800$ in 2009, similar to the estimate of $48,000 \pm 7,900$ in 2004, the previous year with very low production. The fall flight for EPP geese is expected to be lower than in 2008, with a lower proportion of young.

Mississippi Valley Population: Late spring conditions affected nesting activity for MVP geese as it did with other goose populations in the Hudson Bay region. The 2009 total population estimate for Mississippi Valley Population (MVP) Canada geese was 581,200, 21% below the 2008 estimate of 626,400 and three percent below the 1989-2008 average. The estimate of 239,600 breeding adults was 35% below the 1989-2008 average and is the lowest ever recorded. Few young are expected to be present in the fall flight this year.

Tallgrass Prairie Population: Because the Tallgrass Prairie Population nest in the high arctic, production is often affected by weather and late snow melt. Summer field crews have not yet arrived on Baffin Island as of late July, but limited information suggests that spring breakup during 2008 was near average. Based upon this limited information, the fall flight may be similar to recent years.

Giant Canada Geese: The Mississippi Flyway 2009 spring estimate of 1.9 million giant Canada geese is similar to the 2008 estimate of 1.7 million. The Missouri 2009 estimate of 52,400 was similar to the last several years. The population estimate for Missouri increased from 30,300 during 1993 to a high of 77,100 during 2000. Control activities and harvest regulations focusing on giant Canada geese appear to be working with relatively stable populations since 2000. Production during spring 2009 appears to have been at least average in spite of periods of flooding and cold temperatures during the breeding period.

White-Fronted Geese: White-fronted geese nest across a broad region from Alaska to the eastern Arctic and are not surveyed in the spring like other waterfowl species. Instead, a survey is conducted each fall on their staging areas in Prairie Canada. The 2008 fall survey resulted in a new 3-year (2006-2008) average of 679,300 which is 6% above the previous mean of 639,400. Nesting activities were delayed in the central Arctic and production there is expected to be below average in 2009. However, production is expected to be average to above average in the western portion of their range. Overall, the fall flight of white-fronted geese is expected to be near average during 2009.

Light Geese: The 2008-09 Midwinter Waterfowl Survey resulted in an estimate of 2.75 million Mid-Continent Population (MCP) light geese, which is 12% more than the previous year. After peaking at nearly 3 million in 1998, numbers of the MCP light geese have been variable, but generally stable. Based upon limited information, overall production of light geese is expected to be below average in 2009 and include a lower proportion of young in the fall flight compared to 2008.

2009-10 Waterfowl Season Frameworks: Broad frameworks of waterfowl hunting dates, season lengths, and bag limits are developed by the U.S. Fish and Wildlife Service in cooperation with states from each of the 4 flyways – Atlantic, Mississippi (including Missouri), Central, and Pacific. The result

of this regulations process is a general waterfowl season framework within which states select specific season dates. All states within each flyway share a common framework of season lengths and bag limits; thus, Missouri's basic season structure is the same as the states from Minnesota in the North to Louisiana in the South. States can recommend a season more restrictive but no more liberal than the federal framework.

Adaptive Harvest Management: Duck seasons are based on regulatory alternatives developed under the Adaptive Harvest Management Program (AHM). Each year's regulation recommendations under AHM are based on the status of the mallard breeding population and the condition of prairie ponds in Canada. A 3-tiered package of open seasons includes liberal (60 days), moderate (45 days), and restrictive (30 days), options. For the 13th consecutive year, AHM calls for a 60-day season with a 6-duck daily bag limit in 2009-10.

Canvasbacks: Canvasbacks are among the least abundant of the "major" duck species. Because of their historically low numbers, canvasback regulations have been conservative. The harvest management strategy is to maintain a spring breeding population of at least 500,000 canvasbacks. The spring 2009 population estimate of 662,000 will support a full 60-day season with a 1-bird daily bag limit in the Mississippi Flyway.

Pintails: The 2009 population estimate of 3.2 million is 23% higher than the 2008 estimate, but still is 20% below the long-term average. Modeling suggests a fall flight estimate of 5.13 million pintails. The population will support a full 60-day season with a 1-bird bag limit in the Mississippi Flyway.

Scaup: Scaup have not recovered from a long-term decline. The 2009 breeding population estimate increased from 3.74 million during 2008 to 4.2 million during 2009 (+12%). Although this estimate is not statistically different from 2008, under the U.S. Fish and Wildlife Service scaup harvest strategy, a moderate scaup season will be offered during 2009. The moderate package allows for a 2-bird bag for the entire season. Regardless, concern for the status of scaup remains as the 2009 population estimate is still 18% below the long-term average.

Canada Goose Season Framework: Changes in the Canada goose season framework first implemented in 2006 to provide more hunting opportunity and to evaluate the potential impacts of higher harvests on migrant vs. resident Canada goose stocks will continue during 2009. A season length of 79 days with no limit on the number of days allowed after November will be sufficient to allow an early segment targeting local giant Canada geese plus opportunity for late season Canada goose hunting when migrants are most prevalent. The first segment of at least 9 days prior to 16 October includes a bag limit of three, and during the remainder of the season, a bag limit of two. In the past, poor production of EPP geese would have triggered more restrictive Canada goose hunting regulations in Missouri and other EPP states. However, under the current framework no changes are warranted. This means goose hunters will have 62 days of late season opportunity in December and January along with a 2-bird bag limit. In 2004, the last year with a bust in production, the Missouri goose season included only 40 days in December and January and a 1-bird daily bag limit.

White-fronted Goose Harvest Management: More liberal white-fronted goose regulations implemented since 1999, and increased incidental harvest of white-fronted geese associated with longer duck seasons since 1997, are thought to have contributed to a decline in numbers of white-fronted geese by 2003. The federal framework now calls for a season that may either be 72 days with a 2-bird bag limit, or 86 days with a 1-bird bag limit. Mid-Continent Population (MCP) white-fronted geese are managed under cooperative agreements between the Central, Mississippi, and Pacific Flyways.

Spring 2010 Conservation Order: A light goose Conservation Order will be in effect for the 12th consecutive year. The Conservation Order will be in effect from February 1-April 30, 2010. Lesser snow (white and blue color phase) and Ross's geese may be taken with the use of electronic calls, unplugged shotguns, and shooting until ½ hour after sunset. A Conservation Order Permit is the only permit needed for residents and nonresidents during the Conservation Order. An exception to the above permit requirement is persons 15 years of age and younger, provided either 1) s/he is in the immediate presence of a properly licensed adult (must possess a Conservation Order Permit) who is eighteen (18) years of age or older and has in his/her possession a valid hunter education certificate card, or was born before January 1, 1967 or 2) s/he possesses a valid hunter education certificate card. A federal duck stamp is not required and there is no limit during the Conservation Order.

Youth Waterfowl Hunting Days: Youth hunting days incorporate a weekend or holidays up to 14 days before or after the regular season. The bag limit is the same as during the regular season. Youth must be accompanied by an adult who is not allowed to hunt ducks but who can participate in other open seasons (e.g., geese). Only ducks were allowed during 1996-1997; however, geese also could be taken by youth hunters beginning in 1998; the same holds true for 2009.

Rationale for Missouri Waterfowl Seasons: Information for recommending specific waterfowl seasons for Missouri includes migration timing, weather, habitat conditions, and hunters' preferences. Unfortunately, it is impossible to predict in August what these conditions will look like in November-January. Based on hunters' desires for later seasons, Missouri moved the opening date back about week in each zone beginning in 2004. Since then, the duck season has opened on the last Saturday in October in the North Zone, the first Saturday in November in the Middle Zone, and on Thanksgiving or the Friday thereafter in the South Zone. This season structure provides a potential range of opening dates from October 25 through October 31 in the North Zone, November 1 through November 7 in the Middle Zone, and November 22-28 in the South Zone. Maintaining opening dates associated with specific weeks of the month allows the timing of duck season to vary by seven days within a six-year period and accommodates those with earlier or later preferences over this period of time.

Hunters' Views about Duck Season Dates: We continue to solicit hunter input on preferred season timing by including questions on the Annual Waterfowl Post-Season Harvest Survey and a more in-depth survey administered approximately every five years. All hunter preferences are legitimate; however, varied attitudes about the "best" season are not necessarily shared by all hunters even in a local area. Species preferences (mallards vs. other dabblers), habitat types (shallow, managed sites vs. reservoirs and rivers), and weather conditions (mild vs. severe) are just some of the factors that contribute to differences in views about preferred season timing. As a result, waterfowl season dates always are points of contention. Duck hunters have responded favorably to later seasons first implemented in 2004. During the past three years, the percentage of duck hunters dissatisfied with season dates has ranged from 18% to 22% in the North Zone and from 20% to 22% in the Middle Zone. The percentage of hunters dissatisfied with season dates in the South Zone gradually increased from 17% after the 2005 season to 32% after the 2007 season. The growing dissatisfaction among South Zone hunters coincided with progressively earlier seasons due to the timing of the Thanksgiving holiday weekend. In 2008, Thanksgiving weekend was about a week later than in 2007 and accommodated those hunters wanting a later season than those offered in the recent past. The percentage of South Zone hunters dissatisfied with season dates declined from 32% after 2007 to 23% after the 2008 season.

Hunters' Views about Canada Goose Season Dates: Preferences among Canada goose hunters have shifted dramatically since the 1980s. Growing numbers of giant Canada geese, delays in migration of the EPP, and a wider distribution of geese in Missouri have contributed to these changes. Traditionally, hunters indicated a desire for concurrent duck and goose openers (73% in 1988 and 63% in 1996), but by 2002, this became less important with only 48% wanting concurrent openers, while 72% indicated it was

important to have goose season open as late as possible. This change in preferences coincided with a transition to the later arrival of migrant Canada geese. In a 2008 survey, goose hunters were nearly evenly divided in their preferences for having the early Canada goose season open in early October, concurrent with the duck opener, or in Mid-November before the regular goose season.

Outlook for the 2009-10 Season: Expectations for the 2009-10 waterfowl season in Missouri will undoubtedly be high. Increased numbers of breeding ducks and above average production of young in the fall flight have set the stage for a potentially good duck season. The degree to which this potential is realized in Missouri is dependent upon weather and local habitat conditions. Currently, habitat conditions in Missouri appear to be favorable in most areas. Spring crop planting was delayed in some regions, but yields are not expected to be significantly affected. Production of moist soil vegetation appears to be average to above average in most regions. Barring major late summer flooding, habitat conditions appear to be relatively good going into fall. Timely rainfall will be needed to ensure availability of wetland food to ducks. Poor production on northern goose breeding areas will result in a low proportion of young in migrant goose populations (snow geese, interior Canada geese, and white-fronted geese) but this will be offset by average to above average production of giant Canada geese. Snow and ice cover in states north of Missouri will determine to a large extent the degree to which Canada geese will arrive in Missouri. Hunters will once again have the opportunity to take advantage of a 16-day teal season, a 60-day duck season, late season Canada goose hunting, and the Light Goose Conservation Order.